

ReactionArm[®]

MANIPULATOR

ABSORBS SHOCK. DECREASES INJURY. ERGONOMIC.



ReactionArm shown with optional pedestal, portable base, vertical axes brakes and tool holder.

Positech's pneumatic ReactionArm[®] absorbs shock, torsional forces and impact force from power tools; therefore, reducing carpal tunnel injury and cumulative trauma disorders.

Cumulative trauma injuries cost the United States billions each year. The ReactionArm reduces injuries to workers' wrists, arms and upper bodies by absorbing the shock of the attached power tool.

A power tool mounted on a ReactionArm can easily be moved and positioned throughout the work cell. A variety of styles, capacities and mounting options provide versatility.

❖ Torque Applications



Table top mounted ReactionArm for light duty applications with minimal reach.



Trolley mounted ReactionArm used to cover large work cells while providing extended reach-in.



Inverted floor mounted ReactionArm for low or underside torque.

Positech[™]
CORPORATION
The Leader in Positioning Technology



Quality Systems Registered
ISO 9001:2008/9001:2008
Certificate QSR-408

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For Performance and Quality

- Balance configuration for “zero gravity” control
- Variety of tool holder designs and end joints available or special designs provided
- Work tools and stands that are incorporated into the work cell can be provided
- Vertical axes brakes available
- Pneumatically operated, requires clean dry input pressure
- Precision bearings and thrust washers at rotation axes for smooth motion and long life
- Middle joint leveling to prevent second arm drift
- Remote Start Circuitry available to ensure breaks are engaged prior to vertical torque
- Down bias circuitry allows for operator ease during vertical torque
- Standard pistol grip or optional ergonomic twist grip controls
- Mounting Options: overhead, trolley, pedestal, wall mount, column, machine or mobile/portable base

Positech Advantages

- 5:1 design factor minimum on all structural components
- Main post adjustable friction brake allows the operator to set arm motion for ease of operation
- Reduces repetitive shock force to wrists, arms and upper bodies
- Pilot operated lock valve on lift cylinder prevents vertical arm movement if sudden loss of air pressure occurs
- Minimum Lift Circuit is standard allowing controlled downward movement
- Floor mounted pedestal provided with concrete anchor bolts, mounting hardware and leveling jacks for ease of installation (No grout required)
- Full turn-key or integration of customer supplied torque equipment
- Parallel linkage is standard to support loads beyond end of arm
- Does not require air lubricator

Technical Specifications

| Model | Lift Capacity* lbs (kg) | Reach in (mm) | Lift in (mm) | Torque Capacity ft-lbs (N-m) |
|--------|-------------------------|--------------------|------------------|------------------------------|
| RA150 | 10-100 (5-45) | 36-48 (914-1219) | 12-48 (305-1219) | 111 (150) |
| RA250 | 10-100 (5-45) | 36-48 (914-1219) | 12-48 (305-1219) | 184 (250) |
| RA500 | 25-145 (11-66) | 70-144 (1778-3658) | 36-72 (914-1829) | 369 (500) |
| RA1000 | 25-245 (11-111) | 70-144 (1778-3658) | 36-72 (914-1829) | 737 (1000) |
| RA2000 | 25-225 (11-100) | 70-144 (1778-3658) | 36-72 (914-1829) | 1475 (2000) |
| RA3000 | 25-500 (11-226) | 70-120 (1778-3048) | 36-48 (914-1219) | 2212 (3000) |

Requires 90 psi (6.21 bar) clean dry air to operate at capacity

*Includes payload and tool holder; increasing arm length reduces lift capacity



Pivot mount allows for angular change of a horizontal axis nutsetter.



Swivel mount allows torque in multiple orientations.



Universal mount allows for setting the torque in any direction.



Custom mounting with remote mount pivoting control handle.

Tool Holders

Standard and custom tool holders, operator controls, and specialized circuitry are available to meet customer requirements.

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